

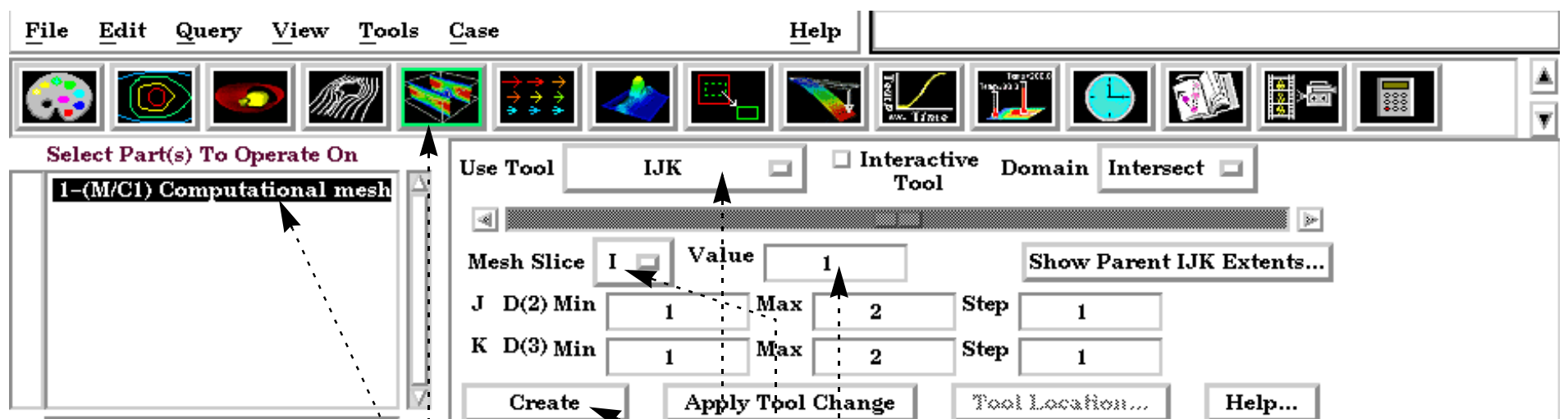


INTRODUCTION

An IJK clip is a 1D or 2D slice through a structured mesh. The resulting clip is a 1D line or 2D surface where one dimension (e.g. I) is held fixed while the other one or two dimensions (e.g. J and K) vary. The minimum and maximum range of the free dimensions can be set by the user, as well as the step size. IJK clips can be animated throughout the range of the fixed dimension by manipulating a slider.

Although planar clips can still be created through structured meshes, it is often preferable to create IJK clips since they are faster to calculate and use less memory. In addition, IJK clips are often more intuitive for the user (who typically built the mesh).

BASIC OPERATION



1. Select the parent part.
2. Click the Clip icon.
3. Select IJK from the Use Tool pulldown.
4. Select the desired fixed dimension from the Mesh Slice pulldown.
5. Enter the value for the fixed dimension in the Value text field and press return.
6. If desired, enter values for the Min, Max, and Step for the two free dimensions to override the defaults (remember to press return).
7. Click Create.

Note that you can change the fixed dimension of an IJK clip at any time (with the Mesh Slice pulldown). If you change one of the numeric values, remember to press return for the change to take effect.

ADVANCED USAGE

Interactive IJK Clipping

You can interactively sweep through the range of the fixed dimension by adjusting a slider with the mouse.

1. Double-click the desired IJK clip part in the parts list.
2. Click Interactive Tool to enable sweeping.
3. Adjust the slider with the mouse.

Use Tool

IJK

☐

☒ Interactive Tool

Domain

Intersect

☐

Mesh Slice

I

☐

Value

1

Show Parent IJK Extents...

J D(2) Min

1

Max

2

Step

1

K D(3) Min

1

Max

2

Step

1

Create

Apply Tool Change

Tool Location...

Help...

Changing IJK Step Refinement

You can modify block-structured model parts to any level of IJK step refinement with proper updating of all dependent parts and variables.

1. Select Edit > Part Feature Detail Editors > Model Parts ... to open the Feature Detail Editor (Model) dialog.
2. In the Creation Attributes area, enter values into the From, To, and Step fields based on their Min and Max limits to update the refinement of the respective I, J, and/or K mesh component directions (remember to press Return).

Feature Detail Editor (Model)

File

Edit

View

Help

I - (M/C1) zone 1 (IN), Mins/Maxs=(I:1/38,J:1/76,K:1/38)

Desc

zone 1 (IN), Mins/Maxs=(I:1/38,J:1/76,

Creation Attributes

Using Node Ranges:

	From	To	Step	Min	Max
I	1	38	1	1	38
J	1	76	1	1	76
K	1	38	1	1	38

Clipping Plane Animation

Although you can interactively sweep an IJK clip through a mesh, it is sometimes desirable to have EnSight automatically calculate a series of IJK clips for you. These can then be replayed (as fast as your graphics hardware will permit) using EnSight's Flipbook Animation facility. See [How To Create a Flipbook Animation](#) for more information.



SEE ALSO

[Introduction to Part Creation](#)
[How To Create a Flipbook Animation.](#)

Other clips:
[How to Create Clip Lines](#)
[How to Create Clip Planes](#)
[How to Create Quadric Clips](#)
[How to Create XYZ Clips](#)
[How to Create XYZ Box Clips.](#)

User Manual: [Clip Create/Update](#)